Amendments to the Specification:

Please replace the paragraph beginning at page 22, line 12, with the following rewritten paragraph:

Depending of the operation with respect to time or frequency in the decoding/demodulation block 634, it should be noted that often a frequency domain representation of the channel may be more suitable than the time domain oriented channel impulse response. Block 634 may for example use a frequency domain equalizer prior to Forward Error Correction decoding. Alternatively, block 634 may incorporate frequency domain channel state information in a Viterbi decoder's path metric when convolutional coding is employed. Hence, additional FFTs are required for this purpose. Furthermore, said operation is performed in parallel for potential multiple receiver antennas. It should also be noted that the Fast Fourier Transform function in block 620, 660 and additional blocks having an FFT mechanism of the same size may use the same hardware. It should be noted that the disclosed invention in addition to the channel estimate capability also enables single channel estimates from a single transmitter antenna. The Inverse Fast Fourier function may also use the same hardware with small alterations of involved multiplication factors.